

**United States Environmental Protection Agency
Region 7
300 Minnesota Avenue
Kansas City, KS 66101**

Date: 05/06/2021

Subject: Transmittal of Sample Analysis Results for ASR #: 8868

Project ID: MS078D00

Project Description: Rose, Martha Chemical CO

From: Margaret E.W. St. Germain, Chief
Laboratory Technology & Analysis Branch
Laboratory Services and Applied Sciences Division

**MARGARET
ST. GERMAIN** Digitally signed by
MARGARET ST. GERMAIN
Date: 2021.05.06
13:14:56 -05'00'

To: Manuel Schmaedick
SEMD/AERR

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. These results are based on samples as received at the Science and Technology Center. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please ensure that you file this electronic (.pdf only) transmittal in your records management system. The Regional Laboratory will now retain all of the original hardcopy documentation (e.g. COC[s] and the R7LIMS field sheet[s], etc.) according to our LSASD records management system.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the Online ASR Sample/Data Disposition and Customer Survey for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Online ASR Sample/Data Disposition and Customer Survey. It is critical that we receive your response in accordance to RCRA and the laboratory accreditation.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Project Manager: Manuel Schmaedick**Org:** SEMD/AERR**Phone:** 913-551-7449**Project ID:** MS078D00**QAPP Number:** 2020268**Project Desc:** Rose, Martha Chemical CO**Location:** Holden**State:** Missouri**Program:** Superfund**Site Name:** ROSE, MARTHA CHEMICAL CO - SITE
EVALUATION/DISPOSITION**Site ID:** 078D **Site OU:** 00**GPRA PRC:** 000DC6**Purpose:** Site Cleanup Support

Vapor Intrusion removal assessment sampling.

PM (MS) noted on the submitted ASR dated 3/29/2021 that this ASR is not part of a litigation hold activity at this time.

GPRA/site code check OK per JE on 3/29/2021.

Explanation of Codes, Units and Qualifiers used on this report**Sample QC Codes:** QC Codes identify the type of sample for quality control purpose.**Units:** Specific units in which results are reported.

___ = Field Sample

ug/m3 = Micrograms per Cubic Meter

I.D. = Identification, Species or Other ID

inHg = Inch of Mercury

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.

U = The analyte was not detected at or above the reporting limit.

J = The identification of the analyte is acceptable; the reported value is an estimate.

ASR Number: 8868**Sample Information Summary****05/06/2021****Project ID: MS078D00****Project Desc: Rose, Martha Chemical CO**

| Sample No | QC Code | Matrix | Location Description | External Sample No | Start Date | Start Time | End Date | End Time | Receipt Date |
|-----------|---------|--------|----------------------|--------------------|------------|------------|------------|----------|--------------|
| 1 - ___ | | Air | 507 | | 04/26/2021 | 15:50 | 04/27/2021 | 15:05 | 04/30/2021 |
| 2 - ___ | | Air | 501CS | | 04/26/2021 | 16:10 | 04/27/2021 | 15:20 | 04/30/2021 |
| 3 - ___ | | Air | 500IA | | 04/26/2021 | 16:35 | 04/27/2021 | 15:45 | 04/30/2021 |
| 4 - ___ | | Air | 406IA | | 04/27/2021 | 10:41 | 04/27/2021 | 15:20 | 04/30/2021 |
| 5 - ___ | | Air | 406SS | | 04/27/2021 | 10:40 | 04/27/2021 | 15:25 | 04/30/2021 |
| 6 - ___ | | Air | 505CS | | 04/27/2021 | 11:35 | 04/28/2021 | 10:05 | 04/30/2021 |
| 7 - ___ | | Air | 201 | | 04/27/2021 | 13:15 | 04/28/2021 | 11:48 | 04/30/2021 |
| 8 - ___ | | Air | 603IA | | 04/28/2021 | 08:23 | 04/28/2021 | 15:00 | 04/30/2021 |
| 9 - ___ | | Air | 603SS | | 04/28/2021 | 08:24 | 04/28/2021 | 15:10 | 04/30/2021 |
| 10 - ___ | | Air | 403SS | | 04/28/2021 | 11:29 | 04/28/2021 | 17:32 | 04/30/2021 |
| 11 - ___ | | Air | 403IA | | 04/28/2021 | 11:29 | 04/28/2021 | 17:30 | 04/30/2021 |
| 12 - ___ | | Air | 106 | | 04/28/2021 | 11:05 | 04/28/2021 | 16:10 | 04/30/2021 |
| 13 - ___ | | Air | 807IA | | 04/28/2021 | 12:32 | 04/29/2021 | 09:10 | 04/30/2021 |
| 14 - ___ | | Air | 807SS | | 04/28/2021 | 12:32 | 04/29/2021 | 09:10 | 04/30/2021 |
| 15 - ___ | | Air | 500BMT | | 04/27/2021 | 16:00 | 04/28/2021 | 14:52 | 04/30/2021 |

Analysis Comments About Results For This Analysis

1 Air VOA Field Parameters**Lab:** (Field Measurement)**Method:** Measurement of field parameter

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 7-__
 8-__ 9-__ 10-__ 11-__ 12-__ 13-__ 14-__
 15-__

Comments:

(N/A)

1 VOCs in Air Samples in Canisters at Ambient Levels by GC/MS**Lab:** Region 7 EPA Laboratory - Kansas City, Ks.**Method:** EPA Region 7 RLAB Method 3230.4I

Samples: 1-__ 2-__ 3-__ 4-__ 5-__ 6-__ 7-__
 8-__ 9-__ 10-__ 11-__ 12-__ 13-__ 14-__
 15-__

Comments:

Trichloroethene (119%, limit is 118%) was J-coded in samples 8, 13, and 14. Although the analyte in question has been positively identified in the samples, the quantitation is an estimate (J-coded) due to high recovery of this analyte in the laboratory control sample. The actual concentration for this analyte may be lower than the reported value.

Dilutions were necessary due to insufficient sample volume collected in samples 4, 5, and 13 for this analysis. This increased the reporting limits by a factor of 10x for these samples. An initial attempt was made to analyze a full 500cc aliquot of these samples; however, the preconcentrator could not pull enough sample to continue with the analysis. Re-analysis of 1/10x dilutions were able to be processed and were reported with elevated reporting limits for these samples.

ASR Number: 8868**RLAB Approved Sample Analysis Results****05/06/2021****Project ID:** MS078D00**Project Desc:** Rose, Martha Chemical CO

| Analysis/ Analyte | Units | 1-__ | 2-__ | 3-__ | 4-__ |
|--|--------------|-------------|-------------|-------------|-------------|
| 1 Air VOA Field Parameters | | | | | |
| Canister ID | I.D. | 808 | 678 | 692 | 691 |
| Regulator ID | I.D. | 062 | 097 | 049 | 161 |
| Starting Pressure | inHg | -30 | -28 | -29 | -26 |
| Ending Pressure | inHg | -5 | 0 | -5 | -10 |
| 1 VOCs in Air Samples in Canisters at Ambient Levels by GC/MS | | | | | |
| 1,1-Dichloroethane | ug/m3 | 0.82 U | 0.82 U | 0.82 U | 8.2 U |
| 1,1-Dichloroethene | ug/m3 | 0.36 | 0.20 U | 0.20 U | 2.0 U |
| Tetrachloroethene | ug/m3 | 0.34 U | 0.34 U | 0.34 U | 3.4 U |
| 1,1,1-Trichloroethane | ug/m3 | 1.1 U | 1.1 U | 1.1 U | 11 U |
| Trichloroethene | ug/m3 | 0.14 U | 0.14 U | 0.14 U | 1.4 U |
| Vinyl Chloride | ug/m3 | 0.13 U | 0.13 U | 0.13 U | 1.3 U |

ASR Number: 8868**RLAB Approved Sample Analysis Results****05/06/2021****Project ID:** MS078D00**Project Desc:** Rose, Martha Chemical CO

| Analysis/ Analyte | Units | 5-__ | 6-__ | 7-__ | 8-__ |
|--|--------------|-------------|-------------|-------------|-------------|
| 1 Air VOA Field Parameters | | | | | |
| Canister ID | I.D. | 689 | 829 | 710 | 694 |
| Regulator ID | I.D. | 159 | 047 | 048 | 152 |
| Starting Pressure | inHg | -28 | -29 | -29 | -28 |
| Ending Pressure | inHg | -15 | -6 | -5 | -5 |
| 1 VOCs in Air Samples in Canisters at Ambient Levels by GC/MS | | | | | |
| 1,1-Dichloroethane | ug/m3 | 8.2 U | 0.82 U | 0.82 U | 0.82 U |
| 1,1-Dichloroethene | ug/m3 | 2.0 U | 0.20 U | 0.20 U | 0.20 U |
| Tetrachloroethene | ug/m3 | 3.4 U | 0.34 U | 0.34 U | 0.36 |
| 1,1,1-Trichloroethane | ug/m3 | 11 U | 1.1 U | 1.1 U | 2.4 |
| Trichloroethene | ug/m3 | 1.4 U | 0.14 U | 0.14 U | 0.14 J |
| Vinyl Chloride | ug/m3 | 1.3 U | 0.13 U | 0.13 U | 0.13 U |

ASR Number: 8868**RLAB Approved Sample Analysis Results****05/06/2021****Project ID:** MS078D00**Project Desc:** Rose, Martha Chemical CO

| Analysis/ Analyte | Units | 9-__ | 10-__ | 11-__ | 12-__ |
|--|--------------|-------------|--------------|--------------|--------------|
| 1 Air VOA Field Parameters | | | | | |
| Canister ID | I.D. | 813 | 611 | 643 | 640 |
| Regulator ID | I.D. | 139 | 136 | 160 | 082 |
| Starting Pressure | inHg | -29 | -27 | -29 | -31 |
| Ending Pressure | inHg | -6 | -9 | -8 | -11 |
| 1 VOCs in Air Samples in Canisters at Ambient Levels by GC/MS | | | | | |
| 1,1-Dichloroethane | ug/m3 | 0.82 U | 0.82 U | 0.82 U | 0.82 U |
| 1,1-Dichloroethene | ug/m3 | 0.20 U | 0.20 U | 0.20 U | 0.20 U |
| Tetrachloroethene | ug/m3 | 0.34 U | 0.34 U | 0.34 U | 2.5 |
| 1,1,1-Trichloroethane | ug/m3 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| Trichloroethene | ug/m3 | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Vinyl Chloride | ug/m3 | 0.13 U | 0.13 U | 0.13 U | 0.13 U |

ASR Number: 8868**RLAB Approved Sample Analysis Results****05/06/2021****Project ID:** MS078D00**Project Desc:** Rose, Martha Chemical CO

| Analysis/ Analyte | Units | 13-__ | 14-__ | 15-__ |
|--|--------------|--------------|--------------|--------------|
| 1 Air VOA Field Parameters | | | | |
| Canister ID | I.D. | 733 | 709 | 819 |
| Regulator ID | I.D. | 087 | 088 | 042 |
| Starting Pressure | inHg | -29 | -26 | -29 |
| Ending Pressure | inHg | 0 | 0 | -5 |
| 1 VOCs in Air Samples in Canisters at Ambient Levels by GC/MS | | | | |
| 1,1-Dichloroethane | ug/m3 | 8.2 U | 0.82 U | 0.82 U |
| 1,1-Dichloroethene | ug/m3 | 2.0 U | 0.20 U | 0.20 U |
| Tetrachloroethene | ug/m3 | 18 | 0.80 | 0.34 U |
| 1,1,1-Trichloroethane | ug/m3 | 11 U | 1.1 U | 1.1 U |
| Trichloroethene | ug/m3 | 3.0 J | 0.20 J | 0.14 U |
| Vinyl Chloride | ug/m3 | 1.3 U | 0.13 U | 0.13 U |

**CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

| | | | |
|---|---|--|-----------------|
| EPA PROJECT MANAGER (Print) Manuel Schmaedick | SITE OR SAMPLING EVENT Martha Rose Chem. Site | DATE OF SAMPLE COLLECTION(S) 4 26-29 2021 MONTH DAY YEAR | SHEET 1 of 1 |
|---|---|--|-----------------|

CONTENTS OF SHIPMENT

| ASR AND SAMPLE NUMBER | TYPE OF CONTAINERS | | | | | SAMPLED MEDIA | | | | RECEIVING LABORATORY REMARKS OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.) |
|-----------------------------|---|--------------------|--------|--------|-------------------------|---------------|-------|----------|-------|---|
| | 1 L. PLASTIC BOTTLE | 500 mL CANISTER | BOTTLE | BOTTLE | VOA SET (3 VIALS EA) | WATER | SOLID | NO WASTE | OTHER | |
| | NUMBER(S) OF CONTAINERS PER SAMPLE NUMBER | | | | | | | | | |
| 8868-1 | | 1 | | | | | | | ✓ | can # in Ink diff. than ingrave, see field sheet |
| 8868-2 | | 1 | | | | | | | ✓ | |
| 8868-3 | | 1 | | | | | | | ✓ | |
| 8868-4 | | 1 | | | | | | | ✓ | Owner stopped sample early |
| 8868-5 | | 1 | | | | | | | ✓ | Owner stopped sample early |
| 8868-6 | | 1 | | | | | | | ✓ | |
| 8868-7 | | 1 | | | | | | | ✓ | |
| 8868-8 | | 1 | | | | | | | ✓ | |
| 8868-9 | | 1 | | | | | | | ✓ | Can # different in Ink than ingrave, see field sheet |
| 8868-10 | | 1 | | | | | | | ✓ | |
| 8868-11 | | 1 | | | | | | | ✓ | |
| 8868-12 | | 1 | | | | | | | ✓ | owner stopped sample early, may not be usable |
| 8868-13 | | 1 | | | | | | | ✓ | Regulator dial broken, estimate press. |
| 8868-14 | | 1 | | | | | | | ✓ | Regulator dial broken, estimate press |
| 8868-15 | | 1 | | | | | | | ✓ | |
| | | | | | | | | | | |
| | | | | | | | | | | ASR complete.nr4/30/2021 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | Air canisters. No temp. needed/required |
| | | | | | | | | | | on crates. nr4/30/2021 |
| | | | | | | | | | | |

| DESCRIPTION OF SHIPMENT | MODE OF SHIPMENT |
|--|--|
| 15 CONTAINER(S) CONSISTING OF 3 CRATE(S) ICE CHEST(S): OTHER nr4/30/2021 | <input type="checkbox"/> COMMERCIAL CARRIER <input checked="" type="checkbox"/> SAMPLER CONVEYED <div style="text-align: right;">(SHIPPING AIRBILL NUMBER)</div> |

| PERSONNEL CUSTODY RECORD | | |
|---|---|--|
| RELINQUISHED BY (PWSAMPLER) MANUEL SCHMAEDICK Digitally signed by MANUEL SCHMAEDICK Date: 2021.04.29 14:03:40 -0500 <input checked="" type="radio"/> SEALED <input type="radio"/> UNSEALED | RECEIVED BY NICOLE ROBLESZ Digitally signed by NICOLE ROBLESZ Date: 2021.04.30 08:58:31 -0500 <input checked="" type="radio"/> SEALED <input type="radio"/> UNSEALED | REASON FOR CHANGE OF CUSTODY STC Analyses |
| RELINQUISHED BY (PWSAMPLER) <input type="radio"/> SEALED <input type="radio"/> UNSEALED | RECEIVED BY <input type="radio"/> SEALED <input type="radio"/> UNSEALED | REASON FOR CHANGE OF CUSTODY |
| RELINQUISHED BY (PWSAMPLER) <input type="radio"/> SEALED <input type="radio"/> UNSEALED | RECEIVED BY <input type="radio"/> SEALED <input type="radio"/> UNSEALED | REASON FOR CHANGE OF CUSTODY |
| RELINQUISHED BY (PWSAMPLER) <input type="radio"/> SEALED <input type="radio"/> UNSEALED | RECEIVED BY <input type="radio"/> SEALED <input type="radio"/> UNSEALED | REASON FOR CHANGE OF CUSTODY |